

Regulatory Plan: *Missouri Numeric Water Quality Criteria Nutrients in Lakes and Reservoirs*

Mission Statement: Approval of Missouri's Numeric Nutrient Criteria for Lakes and Reservoirs.

Status: The EPA is waiting for two items from Missouri.

1. Science to support the state's selection of an apex predator as its indicator fish that the water quality criteria will be protective of "a wide variety of biota."
2. An implementation plan to answer questions raised by EPA staff.

Key Issues under Consideration:

1. Is the health of an apex predator/sport fish population in Missouri lakes indicative of the overall ecosystem health and the presence of a "wide variety of biota?"
 - a. EPA staff raised concerns about a lack of scientific basis for using an apex predator to measure overall system health.
 - b. EPA staff have also asserted that Missouri stocks this apex predator, so it is unreasonable to use a stocked fish as an indicator because it does not propagate naturally in the system.
2. Are the combined criteria (numeric limit and screening thresholds + biological response parameters (called "Response Impairment Thresholds" in Missouri's submittal)) protective?
 - a. EPA staff expressed concerns that three of Missouri's response impairment thresholds are narrative without a clear approach for interpretation. In other words, EPA is concerned that Missouri's promulgated response impairment thresholds are not objectively measurable and protective.
 - b. EPA has concerns with the response impairment threshold for dissolved oxygen (DO) because it is to be measured in the shallow portion of the lake, where staff believe DO problems are less likely to occur.

Proposed Resolution to Key Issues:

1.

2.

3.

Deliberative Process / Ex. 5